

## Polyvinylbutyral HVB-0005

### Description:

HVB-0005 is a low viscosity thermoplastic Polyvinylbutyral Resin combining a very large surface area with medium molecular weight. Its sensorial properties are outstanding.

The product is soluble in solvents like Alcohols or Glycol Ethers, it is compatible with Esters and Ketones. HVB-0005 shows excellent compatibility with other resins like Nitrocellulose, Epoxy Resins, Epoxy Alkyds, Phenolic Resins, Polyurethanes, Melamine-Formaldehyde Resins, Ketonic Resins and Polyamides. With its free hydroxyl groups the material is chemically reactive.

### Application:

Printing Inks and lacquers: HVB-0005 is an ideal choice for formation of printing inks for flexible packaging (Flexographic & Gravure application). The product offers good water resistance combined with good blocking resistance, excellent pigment wetting and good flow. It shows good adhesion to substrates like Cellulose Acetate, Polyester, Polystyrene or Metalized Films.

HVB-0005 is suitable for food packaging applications.

Wash Primers: HVB-0005 can be used for formulation of wash primers for steel storage tanks, bottom of ships, airplane, bridges, dam locks, trailers, farm equipment, automotive, rail coaches etc.

The material offers flexible films with good adhesion to metal surfaces.

Adhesives: HVB-0005 acts as a plasticizer for adhesive formulations based on Epoxy, Phenolic, Melamine-Formaldehyde Resins and Isocyanates. It helps improving interfacial adhesion, flexibility, impact strength and resistance against solvent, chemicals or high temperature.

Ceramics: HVB-0005 solution can be used as a temporary binder for ceramic powder. Typically 2 – 4 % PVB-resin are added to Ceramic. During sintering process HVB-0005 undergoes thermal degradation leaving virtually no residue. It leads to very good green strength and dimensional stability.

### Typical properties:

Property	Typical value
Appearance	Free flowing white powder
Viscosity* @ 30 °C [s]	48 – 58
Bulk Density [g/m <sup>3</sup> ]	0.245 – 0.291
Acid value [mg KOH/g]	Max 1
Polyvinyl alcohol content [% w/w]	14 – 17
Polyvinyl acetate content [% w/w]	1.0 – 1.5
Polyvinyl butyral content [% w/w]	80 – 90

\* Ford Cup B4, 20% resin in Ethanol

## Storage:

It is strictly recommended to store the material under dry conditions and to process it quickly once the bag is opened. Typical storage temperature should be between 15 – 30 °C. The product should be stored under the exclusion of air, light and moisture.

## Shelf Life:

The product has a shelf life of at least 12 months from the date of manufacture.

## Packaging:

10 kg Paper bags with HDPE liner.

## Safety:

When handling this product, please work according to the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

This Technical Data Sheet can only be of an advisory nature. Our data reflect the latest state of our knowledge and are based on the characteristics established in the laboratory and on practical experience. Because there are many factors under the control of the user which may affect processing or application/use, it is necessary for the user to carry out appropriate tests to determine whether the product is technically and safely suitable for the particular purpose, prior to use. No warranties of any kind, either expressed or implied, are made regarding the product here described. We assume no liability for correctness.